

## TELECOMMUNICATIONS FOR THE DISABLED ACT OF 1982

SEPTEMBER 28, 1982.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. DINGELL, from the Committee on Energy and Commerce,  
submitted the following

### REPORT

[To accompany S. 2355]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Commerce, to whom was referred the bill (S. 2355) to amend the Communications Act of 1934 to provide that persons with impaired hearing are ensured reasonable access to telephone service, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

The amendments are as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

That this act may be cited as the "Telecommunications for the Disabled Act of 1982".

SEC. 2. The Congress finds that—

(1) all persons should have available the best telephone service which is technologically and economically feasible;

(2) currently available technology is capable of providing telephone service to some individuals who, because of hearing impairments, require telephone reception by means of hearing aids with induction coils, or other inductive receptors;

(3) the lack of technical standards ensuring compatibility between hearing aids and telephones has prevented receipt of the best telephone service which is technologically and economically feasible; and

(4) adoption of technical standards is required in order to ensure compatibility between telephones and hearing aids, thereby accommodating the needs of individuals with hearing impairments.

SEC. 3. Title VI of the Communications Act of 1934 (47 U.S.C. 601 et seq.) is amended by adding at the end thereof the following new section:

#### "TELEPHONE SERVICE FOR THE DISABLED

"SEC. 610. (a) The Commission shall establish such regulations as are necessary to ensure reasonable access to telephone service by persons with impaired hearing.

"(b) The Commission shall require that essential telephones provide internal means for effective use with hearing aid that are specially designed for telephone

use. For purposes of this subsection, the term 'essential telephones' means only coin-operated telephones, telephones provided for emergency use, and other telephones frequently needed for use by persons using such hearing aids.

"(c) The Commission shall establish or approve such technical standards as are required to enforce this section.

"(d) The Commission shall establish such requirements for the labeling of packaging materials for equipment as are needed to provide adequate information to consumers on the compatibility between telephones and hearing aids.

"(e) In any rulemaking to implement the provisions of this section, the Commission shall specifically consider the costs and benefits to all telephone users, including persons with and without hearing impairments. The Commission shall ensure that regulations adopted to implement this section encourage the use of currently available technology and do not discourage or impair the development of improved technology.

"(f) The Commission shall complete rulemaking actions required by this section and issue specific and detailed rules and regulations resulting therefrom within one year after the date of enactment of the Telecommunications for the Disabled Act of 1982. Thereafter the Commission shall periodically review such rules and regulations. Except for coin-operated telephones and telephones provided for emergency use, the Commission may not require the retrofitting of equipment to achieve the purposes of this section.

"(g) Any common carrier or connecting carrier may provide specialized terminal equipment needed by persons whose hearing, speech, vision, or mobility is impaired. The State commission may allow the carrier to recover in its tariffs for regulated service reasonable and prudent costs not charged directly to users of such equipment.

"(h) The Commission shall delegate to each State commission the authority to enforce within such State compliance with the specific regulations that the Commission issues under subsections (a) and (b), conditioned upon the adoption and enforcement of such regulations by the State commission."

Amend the title so as to read:

A bill to amend the Communications Act of 1934 to provide reasonable access to telephone service for persons with impaired hearing and to enable telephone companies to accommodate persons with other physical disabilities.

## PURPOSE AND SUMMARY

The Telecommunications for the Disabled Act of 1982 directs the Federal Communications Commission (the Commission) to address the need of persons with impaired hearing to have reasonable access to telephone service. In particular, the Act requires the Commission to establish uniform standards to ensure that essential telephones are compatible with hearing aids throughout the Nation. The legislation also permits States to continue programs that subsidize the provision of specialized terminal equipment to persons with physical disabilities and thereby assures handicapped persons continued access to vital telecommunications services at affordable rates.

## HEARINGS

The Subcommittee on Telecommunications, Consumer Protection, and Finance held hearings on related provisions of H.R. 5158, the Telecommunications Act of 1982, on February 26, 1982.

## COMMITTEE CONSIDERATIONS

On September 23, 1982 the full Committee on Energy and Commerce met in open markup session and, a quorum being present, considered H.R. 7168, adopting one amendment. Following adoption of a motion to discharge the Subcommittee on Telecommunications, Con-

sumer Protection, and Finance from further consideration of S. 2355, a companion Senate bill, the Committee struck the text and long title of S. 2355; substituted therefor the text and long title of H.R. 7168, as amended by the Committee; and by voice vote, ordered S. 2355, as so amended, reported to the House.

#### BACKGROUND AND NEED FOR LEGISLATION

The Nation's telephone companies have traditionally gone to substantial lengths to accommodate the needs of the physically impaired. Over are years, the Bell System Companies have demonstrated a particular commitment to providing the best feasible service to the handicapped. In fact, Alexander Graham Bell invented the telephone in the course of his endeavors to aid the deaf. One prominent example of the continuing efforts of the industry has been the maintenance of public telephones that are compatible with hearing aids. Today, all coin-operated telephones that the Bell Operating Companies own can be used with specially designed hearing aids; by the end of this year, the same will be true of telephones in territories served by GTE.

Presently, telephone companies also cooperate with State utility commissions to ensure that persons with physical disabilities have access to our telephone network. Dramatic evidence of this cooperation is abundant. The totally deaf may obtain teletypewriters from many local telephone companies. Artificial larynxes developed by Bell Labs give voices to persons otherwise unable to speak. Persons with severe mobility impairments can signal an operator by exhaling on a suspended piece of tin foil that connects to a special telephone. On September 10, 1982, Bell Labs announced another breakthrough for the disabled—a paralyzed individual would be able to activate a telephone with his voice, speak the telephone number, and complete a call without assistance. In many cases, the physically impaired can afford these innovations only because local telephone companies provide these types of equipment below cost. The general ratepayer shares the unrecovered expenses of including disabled persons in the network.

In most States, carriers work with the State commission to develop reasonable programs that meet the needs of the hearing aid user and of other persons with special physical problems. But an unintended consequence of a new government regulation would jeopardize this status quo and make it impossible for the telephone company effectively to serve the handicapped.

The final decision of the Federal Communications Commission in the *Second Computer Inquiry*<sup>1</sup> is popularly known as *Computer II*. This order, which becomes effective in January, 1983, would prohibit telephone companies from subsidizing terminal equipment and require users to pay the full costs of equipment in their homes and places of business. The Commission proposes to rely upon competition to provide telephone equipment at affordable prices. For most ratepayers, deregulation may indeed ensure a competitive market in telephone sets and eliminate subsidies for such sets from local rates. For the disabled, however, the ban on cross-subsidization could mean unregulated price increases on the costly devices that are necessary for them to have access to the telephone network. Disabled persons who are

<sup>1</sup> Docket 20828, final decision released May 2, 1980, 77 F.C.C. 2d 384.

unable to afford the full costs of this equipment will lose access to telephone service. This would disserve the statutory goal of universal service, deprive many individuals of the opportunity to have gainful employment, and even require institutionalization of those disabled persons whose health must be monitored. The costs to society of such lost access, including impairment of the quality of life for disabled Americans, far exceed the costs of maintaining service that the current system allows telephone companies to include in their general revenue requirements.

The existing regime relies on the private enterprise of telephone carriers, rather than on a government bureaucracy, to ensure that the handicapped have access to the universal telephone network. If the Commission implements *Computer II* without modification, it would be unrealistic to expect State and local governments to establish procurement authorities to purchase and install the equipment vital to the disabled. Even if the States could assume this burden, it is unlikely that they could achieve the task as cost-effectively as the telephone company.

The Committee intends this legislation to benefit a specific class of individuals—those who rely on telephones compatible with hearing aids or who rely on other specialized terminal equipment. For years, the special needs of these groups have not received adequate attention at the Commission. The Commission has taken no action to resolve the issues raised in Docket 78-50, opened four years ago in order to consider standards for hearing aid compatibility and to resolve problems facing the deaf. There is no evidence that the Commission gave any consideration to the needs of the handicapped in the context of the *Second Computer Inquiry*, which precludes State commissions from requiring terminal equipment to be offered under tariff.

The Committee urges the Commission not to underestimate the impact that inability to use the telephone has on a person with impaired hearing or other handicaps. The policies set forth in the Telecommunications for the Disabled Act will ensure that these individuals can participate as self-sustaining employees and consumers in the national economy and that they can safely and conveniently travel from State to State with equal access to airports, hotels, restaurants, and other places of public accommodation.<sup>a</sup>

Hearing impairments affect a large number of Americans in all age groups.<sup>b</sup> The Commission has determined that 10.8 million citizens have sufficiently impaired hearing to require the use of a hearing aid. Four hundred thousand are totally deaf, while twice that number cannot understand any speech that is not amplified to a level that is medically dangerous. One of the most frustrating aspects of hearing impairment and deafness is the inability to use telecommunications media on which modern life has grown so dependent. Persons with normal hearing may be unable fully to appreciate the pervasiveness of the telephone both in commercial transactions and personal contacts. The inability to use this instrument, except through an interpreter, is not only a practical disability but a constant source of dependency and personal frustration. Conversely, the ability independently to use

<sup>a</sup> Each of these concerns is closely connected with interstate commerce. *Of. Katzenbach v. McClung*, 379 U.S. 294, 299 (1964); H.R. Rep. No. 914, 88th Cong., 1st Sess. at 18.

<sup>b</sup> According to the Office of Demographic Studies at Gallaudet College, more than 7 million Americans suffer from significant loss of hearing in both ears. Hearing disabilities are particularly widespread among the elderly.

the telephone may enable persons with other severe handicaps—such as paralysis or blindness—to lead self-sufficient lives in regular contact with society. The Committee believes that making the benefits of the technological revolution in telecommunications available to all Americans, including those with disabilities, should be a priority of our national telecommunications policy.

Age	Deaf since childhood	Significant hearing loss	Deafening impaired	Total population
Less than 5	6,000	43,000	70,000	16,344,000
5 to 14	67,000	290,000	665,000	34,938,000
15 to 24	72,000	366,000	1,159,000	42,474,000
25 to 44	75,000	850,000	2,837,000	62,767,000
45 to 64	100,000	1,993,000	4,479,000	44,497,000
Over 65	150,000	4,437,000	7,820,000	25,544,000

Reliance on the private sector to provide access to telecommunications is particularly appropriate in times of fiscal austerity and contraction of government. Ensuring the availability of specialized equipment may enable handicapped individuals to support themselves, and in many cases to avoid institutionalization. The Committee is particularly interested in promoting devices that enable the elderly and the disabled safely to lead independent self-supporting lives. For the paralyzed veterans, "hands-off" telephone equipment may mean the difference between being able to live at home and work in an office or leading a life of constant surveillance in a hospital. Recently, radio devices have been developed that alert a patients' doctor if he fails to signal periodically that he is not in need of medical assistance. The Telecommunications for the Disabled Act allows these various devices to be offered at affordable rates, whether or not a patient is institutionalized, thereby reducing hospital costs and encouraging more economic treatment of the physically impaired as outpatients.

The purpose of the reported bill is not to freeze technology, but rather to ensure that all persons enjoy the benefits of technological improvements in the telephone network, whether or not they are disabled. The Committee recognizes that some new technologies will make improved service possible for the ordinary user, but also may have potentially adverse impacts on disabled individuals. For example, the telephone company may in the future replace operator-assisted directory listings with a video terminal. While offering substantial economies and improved service to most individuals, such a change would eliminate a feature of the network upon which the blind currently rely. Instead of continuing to offer directly assistance for the blind, the most economical solution may be to provide specialized terminal equipment, perhaps actuated by voice, for use by these individuals. Subsection (g) permits the telephone company to implement these efficient solutions to the problems of the disabled. It allows certain terminal equipment to be treated as if it were "part of the network," the costs of which all users share in order to preserve and enhance universality of service.

The Communications Act of 1934 mandates universal service, as do most State statutes that regulate intrastate communications. To the extent that a change in the network (such as a reduction in power lev-

els) confers substantial benefits on most users, but impairs universality of service by excluding disabled groups (such as persons using hearing aids), the Commission or State commission may require carriers to continue using current technologies. By allowing carriers to internalize in the ratebase the costs of making terminal equipment compatible with the technological development of the network, the regulatory authority can reconcile the competing policies and reach an economically superior result. In testimony, Mr. Dennis Sullivan of AT&T discussed this need for such flexibility with regard to the hearing impaired:

The door must be left open for future developments. . . . There may be other solutions to the coupling problem that are far superior to today's inductive coupling. Signal processing technology—currently available on a chip—could someday (perhaps within a decade)—through the use of noise cancellation techniques and low-frequency emphasis—facilitate vastly improved acoustic coupling in hearing aids. This technology is being used today in satellite transmission circuits. *Hearing aid wearers are entitled to benefit from these and other advantages that might result from advancing technology.*

This is particularly important in light of the obvious trend in future telephone technology which is moving toward low-power, lightwave and digital systems. These future systems are expected to use new types of receiver units which will offer many advantages: smaller size, lighter weight, improved voice quality reception, significantly lower manufacturing costs and correspondingly lower consumer rates. Unfortunately, these future systems will also make built-in inductive coupling capability prohibitively expensive. [Emphasis supplied.]

Effective use of telephones by persons with impaired hearing is the goal that this legislation seeks to realize. The current arrangements for inductive coupling are only a means to achieve that goal. The legislation does not seek to entrench this technology, but rather to promote new, compatible technologies that provide improved service to all persons, with or without hearing impairments. Consistent with this policy, new Section 610(g) of the Communications Act of 1934 maintains an efficient financial mechanism to assure that telephone companies continue their historic role in making available the best technologically and economically feasible service to persons with impaired hearing or other physical disabilities.

#### COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause (2)(1)(3)(A) of Rule XI of the Rules of the House of Representatives, the Committee has made oversight findings as set forth in this report.

#### COMMITTEE ON GOVERNMENT OPERATIONS

Pursuant to clause 2(1)(3)(D) of Rule XI of the Rules of the House of Representatives, the Committee on Government Operations has submitted no oversight findings to the Committee.

# COMMITTEE COST ESTIMATE

In compliance with clause 7(a) of Rule XIII of the Rules of the House of Representatives, the Committee does not believe that S. 2355 as reported will impose costs on the Federal government. Although the legislation provides specific instructions with regard to a pending rulemaking, it believes that expeditious action along the lines suggested is necessary in any event. In all other regards, the Committee adopted the estimate provided by the Congressional Budget Office.

## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
Washington, D.C., September 24, 1988.

Hon. JOHN D. DINGELL,  
*Chairman, Committee on Energy and Commerce, U.S. House of Representatives, Rayburn House Office Building, Washington, D.C.*

DEAR MR. CHAIRMAN: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has reviewed S. 2355, the Telecommunications for the Disabled Act of 1982, as ordered reported by the House Committee on Energy and Commerce, September 22, 1982.

S. 2355 would require the Federal Communications Commission (FCC) to develop regulations to ensure reasonable access to telephone service to the hearing impaired. While a similar rulemaking has been initiated by the FCC, the legislation would broaden the authority of the FCC in this area. Based on information provided by the FCC, it is estimated that an additional \$200,000 could be required for staff time plus overhead in 1983 in order to complete this rulemaking within one year after the date of enactment, as required in the bill. In addition, it is likely that a minimum level of monitoring and enforcement would be required for approximately one year after completion of the rulemaking, although the cost of these activities is not expected to be significant.

Should the Committee so desire, we would be pleased to provide further details on this estimate.

Sincerely,

ALICE M. RIVLIN, *Director.*

## INFLATIONARY IMPACT STATEMENT

Pursuant to clause 2(1)(4) of Rule XI of the Rules of the House of Representatives, the Committee states that S. 2355 as reported will have no measurable impact on wages and prices in the national economy.

## SECTION BY SECTION ANALYSIS

Section 1. This section states the short title of the legislation is "The Telecommunications for the Disabled Act of 1982."

Section 2. This section sets forth findings that establish the need to make available technologies that accommodate persons with impaired hearing, and states the policy that all persons, including the

disabled, should have available the best telecommunications service that is technologically and economically feasible.

Section 3. This section adds a new section 610, entitled "Telephone Service for the Disabled," to the Communications Act of 1934. Such new section consists of nine subsections, as follows:

**SUBSECTION (a) OF NEW SECTION 610: REASONABLE ACCESS FOR  
THE HEARING IMPAIRED**

This subsection directs the attention of the Commission to the special problems of persons with impaired hearing. The mandate of the Commission to ensure reasonable access to telephone service is limited to regulations and technical standards that ensure the availability of terminal equipment and transmission service for persons with impaired hearing and that govern the use of such equipment and its interconnection with telephone services for the transmission of voice or data.

These regulations may not impose unnecessary or unjustifiable costs on any party. Before promulgating any regulation under this subsection, the Commission must consider the costs the proposed requirements would impose and the benefits that would result for the hearing impaired and those with whom they communicate.

**SUBSECTION (b) OF NEW SECTION 610: COMPATIBILITY OF  
ESSENTIAL TELEPHONES**

The legislation requires that essential telephones provide internal means for effective use with hearing aids that are specially designed for telephone use. Most hearings aids have a built-in telephone pickup, or "telecoil," which is activated by a switch on the hearing aid. When this switch is placed in the "telephone" position, the microphone is turned off and the hearing aid can be used at full volume without feedback and with minimal background noise. Unless this type of hearing aid becomes technologically obsolete at some future time and disappears from popular use, it will be considered "specially designed for telephone use." Currently, these hearing aids are activated by the strong magnetic field generated by some 90 percent of all telephone receivers, such as the Western Electric 500 set.

The Committee chose not to specify that telephones necessarily use this method, known as "inductive coupling," in order to encourage any new technology which is at least equal to the quality of use that inductive coupling currently provides.<sup>4</sup> A telephone that couples inductively (without the use of a portable adapter) would, however, satisfy this requirement to provide internal means for effective use with hearing aids specially designed for telephone use.<sup>5</sup> Subsection (b) does not require telephones to include internal amplifiers; these devices, which are available in some public telephones, enhance use of the telephone by some persons with impaired hearing, whether or not their hearing aids are specially designed for telephone use.

<sup>4</sup> Although the additional costs of making telephones that are compatible with hearing aids are not now significant, it is possible that improvements in the network—such as a reduction in power levels—may increase this differential in cost.

<sup>5</sup> Persons with impaired hearing have complained that external adapters are too bulky to carry conveniently, draw attention to an apparent disability that has been overcome in all other situations, are susceptible to loss and damage, and require replacement of batteries after 90 hours of use (potentially at an inconvenient time). Western Electric has announced plans to introduce a newly designed adapter that will mitigate some of these inconveniences.



The reported bill does not require all telephones to be compatible with hearing aids. Rather, the bill preserves consumer choice while ensuring that the needs of the hearing impaired are fully served. The legislation focuses on those "essential telephones" to which the hearing impaired must have access if they are to function effectively in modern society. Companies are free to manufacture and to market non-compatible telephones, and businesses and consumers may purchase these instruments for use by persons who do not have hearing impairments.

#### *"Essential Telephones"*

The reported bill sets forth three classes of "essential telephones," each of which must be precisely delineated in the rulemaking that the Commission conducts under new section 610(f). Under no circumstances may the Commission designate as an essential telephone any residential telephone or any other telephone if all the persons who would normally use it do not have hearing impairments. The requirements that federal regulations issued pursuant to this subsection impose will preempt any existing or future State or local regulations that require telephones to provide internal means for effective use with hearing aids.

#### *"Coin-Operated Telephones"*

The term "coin-operated telephone" includes any telephone which is operated with coins, whether it is located on public property or in a "semipublic" location (such as a drug store, gas station, or private club). Since significant electrical power is required to accept coins, compatibility is now economical and should continue to be so in the future. Although the requirement that coin-operated telephones be retrofitted is universal in application, the overwhelming majority of coin phones are already hearing-aid compatible.

#### *"Telephones Provided for Emergency Use"*

The definition that the rulemaking adopts for "telephone provided for emergency use" must enumerate the types of locations in which access to a telephone may save persons from serious bodily injury, theft, or a life-threatening situation. The Committee intends that the term be defined to include voice-carrying devices in elevators, mine-shafts, and other places where a person with impaired hearing might be isolated in an emergency. The term must also include telephones specifically installed to alert the police, fire department, or other emergency authorities; typically such a telephone cannot reach other persons on the network. Finally, the Commission should prescribe specific guidelines for telephones provided to avoid life-threatening situations in hospitals and other institutions in which persons with impaired hearing may be confined.

#### *"Telephones Frequently Needed by Persons with Impaired Hearing"*

The third group of essential telephones to be defined by rule, those "frequently needed by persons with impaired hearing," must be hearing-aid compatible, but the legislation specifically prohibits the Commission from requiring equipment installed prior to the effective date of the Act to be retrofitted. This class includes any telephone that a carrier makes available for public use that is not either coin-operated or provided for emergency use. For example, after the date of enactment, new "Charge-a-Call" phones (or at least a reasonable number

at each location) must be compatible with hearing aids unless they are in the proximity of compatible phones providing the same range of service. The Committee intends that the Commission employ a common-sense approach; if a usable pay phone is nearby and readily available, the incompatible instrument is not "needed by the hearing impaired."

The Committee further intends that the Commission include essential telephones operated by persons other than carriers in this category after a detailed examination of the costs involved and of the benefits that the hearing-impaired and those with whom they communicate will realize. The definitions must be specific and provide detailed guidance as to the locations where such telephones must be available. These federal standards will preempt any additional or inconsistent requirements by State or local authorities.

Although the following examples of "telephones frequently needed by persons with impaired hearing" illustrate the intent of the Committee, it may be necessary periodically to revise the definition of such telephones if the incremental cost of making the telephones compatible increases or decreases.

*Places of Business.*—In the absence of extraordinary costs of implementation, persons with impaired hearing should be confident that they can effectively use any telephone made generally available to invitees in a place of business or in a public building, including phones restricted to local calling areas or to internal extensions.

*Workplaces.*—The Committee is also concerned that inability to use telephones should not impair the productivity of persons using a hearing aid in their place of work. An employee with impaired hearing should have access to at least one compatible telephone unless his duties would not involve the use of such a telephone if it were available. Regulations must be sufficiently specific to enable employers to comply without undue risk of an unexpectedly adverse interpretation in a subsequent proceeding for compliance.

*Hotels and Motels.*—The Committee observes that current law allows the Commission directly to regulate the offering of telephone service by hotel and motel owners. See *Ambassador, Inc. v. United States*, 325 U.S. 317 (1944). The legislation does not, however, impose costly requirements on these businesses. As an alternative to providing compatible telephones in every room, a hotel may set aside a reasonable number of rooms (under a formula that the regulations will specify) for the hearing impaired. Alternatively, the hotel owner may maintain a supply of compatible instruments and install them at the request of a guest who uses a hearing aid.

#### *"Require That Essential Telephones Provide"*

The Committee was concerned that the phrase requiring essential telephones to "be designed, manufactured, and operated so as to provide internal means for effective use with hearing aids" could be construed to permit the FCC to impose a requirement on manufacturers to design or produce compatible equipment. The reported bill resolves any such ambiguity by using more direct language: "The Commission shall require that essential telephones provide internal means for effective use. . . ." This clarifies the intent of the Committee that compliance depend on how an instrument is used, not how it is manufac-

tured. It would not violate the Act to design or manufacture a non-compatible phone, if it is labeled according to applicable regulations. It would violate the Act, however, to use or to connect with the network a noncompatible instrument under circumstances causing it to be designated an "essential telephone."

The legislation does not impose an obligation on any specific person to manufacture compatible equipment. The Committee expects competitive markets to supply equipment for use with hearing aids at affordable prices. For example, equipment such as the Bell System's "U-Type" handset, introduced by Western Electric more than 20 years ago, has also been manufactured by Northern Telecom, ITT, and Stromberg Carlson. According to the Electronic Industries Association, over 80 percent of all telephones in the United States are now compatible. An even larger percentage of essential telephones is already in compliance. The Bell System has installed auxiliary coils to make all of its coin-operated telephones and "Charge-a-Call" stations compatible, and GTE has announced that it will complete a similar program by the end of the year. Western Electric will shortly introduce a new generation of compatible handsets, so compatible equipment should be widely available in the foreseeable future.

#### SUBSECTION (c) OF NEW SECTION 610: TECHNICAL STANDARDS

The Committee notes that the hearing aid industry and the telephone industry have made substantial progress toward establishing technical standards to ensure compatibility of hearing aids and telephones and expects similar efforts to resolve most conflicting standards on other areas. The Committee intends the Commission to rely on the development of standards by industry, but this section also gives the Commission authority to set such standards in the absence of industry agreement or in the event consumers establish that the standard fails to provide satisfactory results.

The Committee does not intend technical standards to freeze technology by specifying a permissible design and excluding potentially superior alternatives. The Commission should expeditiously accept any new design which is compatible with existing technologies and provides results which are equivalent or superior to those achieved by an existing standard.

The Committee intends that any standards established by the Commission (or developed by industry and approved by the Commission) should be nationally uniform, and that States be preempted from establishing conflicting technical standards. With the exception of this subsection and subsection (b), nothing in the legislation changes the division of jurisdictional responsibility between the Commission and the State commissions or in any other way diminishes the rights and authorities of the States as they existed on the date of enactment.

The Committee intends that the application of technical standards take place in the context of current Commission regulations. Part 68 of the rules of the Commission requires customers connecting terminal equipment to the public switched network to supply the telephone company with registration numbers for the types of equipment to be connected.\* In order to make their equipment marketable, manufac-

\* 47 C.F.R. 68.102.

turers submit each equipment type to the Commission for registration, which is approved only if it is determined that the use of the equipment will not harm the network. The conditions for registration include the performance of environmental simulations, which test the equipment to be registered in its intended use.<sup>7</sup> The Committee expects that the Commission will require manufacturers applying for type registrations of telephone sets to specify whether the equipment provides internal means for effective use with hearing aids, and that engineering tests will verify that equipment intended for such use meets the technical standards established pursuant to this subsection. For telephone sets not meeting these standards, the Commission would issue a registration condition on the use of the instrument only in circumstances that would not cause it to be designated an "essential telephone." This limitation would be clearly disclosed to the purchaser, who would be prohibited from using the instrument except as a non-essential telephone.

#### **SUBSECTION (d) OF NEW SECTION 610: LABELING OF PACKAGING MATERIALS**

Subsection (d) directs the Commission to develop requirements for packaging materials that explain, in a clear understandable manner, whether and how persons with impaired hearing may use such equipment effectively. Although the legislation does not specifically require manufacturers to label telephone equipment, the Committee observes that it would be desirable for persons using hearing aids to be able to identify noncompatible telephones whenever traveling outside their homes.

#### **SUBSECTION (e) OF NEW SECTION 610: REGULATORY CONSIDERATIONS**

The legislation delegates to the Commission the establishment of precise requirements in an area of considerable complexity. Moreover, the Committee expects economic and technological possibilities and constraints to shift rapidly. Therefore, this subsection states the policies that the Committee intends to guide the initial rulemaking and any subsequent revisions.

The Commission must consider the costs and benefits of any regulation implemented or rescinded pursuant to this section. Although the statutory language refers to "all telephone users, with or without hearing impairments," the Committee also intends a consideration of social costs and benefits indirectly related to telephone use, including the benefits of reduced institutionalization, increased mobility, and enhanced productivity by disabled persons.

#### **SUBSECTION (f) OF NEW SECTION 610: RULEMAKING; PROSPECTIVITY**

The Committee is concerned by the failure of the Commission expeditiously to conclude Docket 78-50, "Telecommunications for the Deaf and Hearing Impaired." Accordingly, it mandates that the Commission take final action in this rulemaking and issue the regulations that this section requires within one year.

The Committee also intends that the Commission review regulations issued under subsections (a), (b), and (c) in order to assure that they

<sup>7</sup> 47 C.F.R. 68.802.

continue to provide the most cost-effective solution consistent with changing technology.

In order to implement subsection (g), the Committee expects the Commission to issue conforming modifications relating to specialized terminal equipment prior to January 1, 1983, the effective date of its final decision in *Computer II*.

The legislation prohibits the Commission from requiring that telephones "frequently needed for use by persons using hearing aids" be retrofitted. This prohibition applies only to those telephones which fit into neither of the other categories ("coin-operated telephones" or "telephones provided for emergency use") and which were not compatible on the date of enactment. In the event that, after enactment, a person obtains an instrument that is not compatible with hearing aids for installation as an essential telephone, this subsection does not preclude an order requiring that the instruments be brought into compliance.

#### SUBSECTION (g) OF NEW SECTION 610: SPECIALIZED TERMINAL EQUIPMENT

In its *Computer II* decision, the Commission required the provision by carriers of terminal equipment for use in conjunction with the interstate telecommunications network to "be separate and distinct from the provision of common carrier communications services and not offered on a tariffed basis."<sup>47</sup> The detariffing of terminal equipment will cause competition to drive prices to costs and will effectively prevent the State commissions from regulating the price and other terms under which the consumer obtains terminal equipment. The Committee believes that, as applied to disabled persons, such a policy could lead to substantial price increases and reductions in the access to the nationwide network which persons with disabilities currently enjoy.<sup>48</sup> It is the purpose of this legislation to increase the access of the physically impaired to new technologies and not to allow the level of service currently available to deteriorate.

The Committee emphasizes that the exception required from *Computer II* only applies to equipment actually needed by disabled persons. Any tariffs or subsidies from the rate base must be restricted to those persons, to institutions which serve them, and to associates who require compatible equipment regularly in order to communicate with them.

Examples make clear the limited scope of the statutory exception. Speakerphones may be vital to a person with impaired mobility; to a businessman they are a mere convenience. This subsection would only authorize a subsidy directed exclusively at the disabled. In the case

<sup>47</sup> 47 C.F.R. 64.702 (e), as added, 77 F.C.C. 2d at 499.

<sup>48</sup> A study recently commissioned by the Department of Commerce observed:

"Although . . . deregulation may generate new industry competition and superior products at lower prices, Computer Inquiry II probably will bring with it a shift to cost-based pricing; thus, consumers will be forced to bear more and more of the actual cost of the individual services they use. . . . This type of pricing could cause substantial problems for deaf users."

"A Nationwide Communications System for the Hearing Impaired: Strategies Toward Commercial Implementation, NTIA Contract No. NT-81-BAC-00070, prepared by SRI International, at 10 (October 1981)."

of equipment for non-voice communications by the disabled, the State commission could extend a subsidy to non-handicapped persons who require such equipment regularly to communicate with the disabled.

The State commission may allow only reasonable and prudent costs to be included in any tariff. The Committee intends that any excessive costs resulting from discriminatory procurement practices would not be considered reasonable and prudent. To allow recovery in excess of reasonable and prudent costs would severely distort the nationwide market for terminal equipment.

Subsection (g) does not specify that offerings of specialized equipment by carriers be under tariff. As a result of this legislation, it will be permissible to offer such equipment under tariff or on a deregulated basis. Carriers may offer such equipment directly or through a separate corporate entity under common control. In light of the record of voluntary cooperation by the industry, the Committee found it unnecessary specifically to address the possibility of a "recalcitrant carrier" that might decline to participate in a program of subsidized offerings sanctioned by the State commission. Nor does the legislation address the possible offering of terminal equipment to the handicapped under federal tariffs. These matters may be considered, if necessary, in formulating the required modifications to *Computer 11*.

#### SUBSECTION (h) OF NEW SECTION 610: ENFORCEMENT

The Committee believes that to avoid the imposition of undue regulatory burdens on carriers and other persons required to make compatible telephones available, uniform national standards are necessary. Therefore, the legislation preempts the authority of States to issue differing technical standards or substantive requirements relating to the compatibility of telephones with hearing aids. However, the Committee believes that State enforcement of these uniform national standards would be cost-effective as it would avoid Federal adjudication of disputes that are essentially local in nature. Accordingly, subsection (h) requires the Commission to delegate the enforcement of subsections (a) and (b) to any State commission that adopts the Federal regulations issued thereunder as its own. The delegation is revoked if the State commission fails to enforce the regulations. The Commission is expected to take all feasible steps to encourage the States to accept enforcement responsibilities.

The Committee expects the Commission to act promptly—no later than one year after the effective date of this Act—to establish detailed standards for compliance. At the conclusion of this rulemaking, the Commission should issue an order directing compliance with the regulations and publish such order, with an easily understood explanation thereof, in the *Federal Register*. The Committee believes that voluntary or expeditious compliance will be encouraged if a complainant or State commission serves a copy of such order on the alleged violator prior to commencement of any proceeding. The regulations should therefore provide a brief period after notification for compliance with the order before any formal compliance proceeding may commence.

#### CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 8 of Rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

## COMMUNICATIONS ACT OF 1984

## TITLE VI—MISCELLANEOUS PROVISIONS

## TELEPHONE SERVICE FOR THE DISABLED

SEC. 610. (a) *The Commission shall establish such regulations as are necessary to ensure reasonable access to telephone service by persons with impaired hearing.*

(b) *The Commission shall require that essential telephones provide internal means for effective use with hearing aids that are specially designed for telephone use. For purposes of this subsection, the term "essential telephones" means only coin-operated telephones, telephones provided for emergency use, and other telephones frequently needed for use by persons using such hearing aids.*

(c) *The Commission shall establish or approve such technical standards as are required to enforce this section.*

(d) *The Commission shall establish such requirements for the labeling of packaging materials for equipment as are needed to provide adequate information to consumers on the compatibility between telephones and hearing aids.*

(e) *In any rulemaking to implement the provisions of this section, the Commission shall specifically consider the costs and benefits to all telephone users, including persons with and without hearing impairments. The Commission shall ensure that regulations adopted to implement this section encourage the use of currently available technology and do not discourage or impair the development of improved technology.*

(f) *The Commission shall complete rulemaking actions required by this section and issue specific and detailed rules and regulations resulting therefrom within one year after the date of enactment the Telecommunications for the Disabled Act of 1988. Thereafter the Commission shall periodically review such rules and regulations. Except for coin-operated telephones and telephones provided for emergency use, the Commission may not require the retrofitting of equipment to achieve the purposes of this section.*

(g) *Any common carrier or connecting carrier may provide specialized terminal equipment needed by persons whose hearing, speech, vision, or mobility is impaired. The State commission may allow the carrier to recover in its tariffs for regulated service reasonable and prudent costs not charged directly to users of such equipment.*

(h) *The Commission shall delegate to each State commission the authority to enforce within such State compliance with the specific regulations that the Commission issues under subsections (a) and (b), conditioned upon the adoption and enforcement of such regulations by the State commission.*

## TELECOMMUNICATIONS FOR THE DISABLED ACT OF 1982

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SEPTEMBER 28, 1982.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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Mr. DINGELL, from the Committee on Energy and Commerce,  
submitted the following

### REPORT

[To accompany S. 2355]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Commerce, to whom was referred the bill (S. 2355) to amend the Communications Act of 1934 to provide that persons with impaired hearing are ensured reasonable access to telephone service, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

The amendments are as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

That this act may be cited as the "Telecommunications for the Disabled Act of 1982".

SEC. 2. The Congress finds that—

(1) all persons should have available the best telephone service which is technologically and economically feasible;

(2) currently available technology is capable of providing telephone service to some individuals who, because of hearing impairments, require telephone reception by means of hearing aids with induction coils, or other inductive receptors;

(3) the lack of technical standards ensuring compatibility between hearing aids and telephones has prevented receipt of the best telephone service which is technologically and economically feasible; and

(4) adoption of technical standards is required in order to ensure compatibility between telephones and hearing aids, thereby accommodating the needs of individuals with hearing impairments.

SEC. 3. Title VI of the Communications Act of 1934 (47 U.S.C. 601 et seq.) is amended by adding at the end thereof the following new section:

#### "TELEPHONE SERVICE FOR THE DISABLED

"SEC. 610. (a) The Commission shall establish such regulations as are necessary to ensure reasonable access to telephone service by persons with impaired hearing.

"(b) The Commission shall require that essential telephones provide internal means for effective use with hearing aid that are specially designed for telephone



use. For purposes of this subsection, the term 'essential telephones' means only coin-operated telephones, telephones provided for emergency use, and other telephones frequently needed for use by persons using such hearing aids.

"(c) The Commission shall establish or approve such technical standards as are required to enforce this section.

"(d) The Commission shall establish such requirements for the labeling of packaging materials for equipment as are needed to provide adequate information to consumers on the compatibility between telephones and hearing aids.

"(e) In any rulemaking to implement the provisions of this section, the Commission shall specifically consider the costs and benefits to all telephone users, including persons with and without hearing impairments. The Commission shall ensure that regulations adopted to implement this section encourage the use of currently available technology and do not discourage or impair the development of improved technology.

"(f) The Commission shall complete rulemaking actions required by this section and issue specific and detailed rules and regulations resulting therefrom within one year after the date of enactment of the Telecommunications for the Disabled Act of 1982. Thereafter the Commission shall periodically review such rules and regulations. Except for coin-operated telephones and telephones provided for emergency use, the Commission may not require the retrofitting of equipment to achieve the purposes of this section.

"(g) Any common carrier or connecting carrier may provide specialized terminal equipment needed by persons whose hearing, speech, vision, or mobility is impaired. The State commission may allow the carrier to recover in its tariffs for regulated service reasonable and prudent costs not charged directly to users of such equipment.

"(h) The Commission shall delegate to each State commission the authority to enforce within such State compliance with the specific regulations that the Commission issues under subsections (a) and (b), conditioned upon the adoption and enforcement of such regulations by the State commission."

Amend the title so as to read:

A bill to amend the Communications Act of 1934 to provide reasonable access to telephone service for persons with impaired hearing and to enable telephone companies to accommodate persons with other physical disabilities.

## PURPOSE AND SUMMARY

The Telecommunications for the Disabled Act of 1982 directs the Federal Communications Commission (the Commission) to address the need of persons with impaired hearing to have reasonable access to telephone service. In particular, the Act requires the Commission to establish uniform standards to ensure that essential telephones are compatible with hearing aids throughout the Nation. The legislation also permits States to continue programs that subsidize the provision of specialized terminal equipment to persons with physical disabilities and thereby assures handicapped persons continued access to vital telecommunications services at affordable rates.

## HEARINGS

The Subcommittee on Telecommunications, Consumer Protection, and Finance held hearings on related provisions of H.R. 5158, the Telecommunications Act of 1982, on February 26, 1982.

## COMMITTEE CONSIDERATIONS

On September 23, 1982 the full Committee on Energy and Commerce met in open markup session and, a quorum being present, considered H.R. 7168, adopting one amendment. Following adoption of a motion to discharge the Subcommittee on Telecommunications, Con-

sumer Protection, and Finance from further consideration of S. 2355, a companion Senate bill, the Committee struck the text and long title of S. 2355; substituted therefor the text and long title of H.R. 7168, as amended by the Committee; and by voice vote, ordered S. 2355, as so amended, reported to the House.

### BACKGROUND AND NEED FOR LEGISLATION

The Nation's telephone companies have traditionally gone to substantial lengths to accommodate the needs of the physically impaired. Over the years, the Bell System Companies have demonstrated a particular commitment to providing the best feasible service to the handicapped. In fact, Alexander Graham Bell invented the telephone in the course of his endeavors to aid the deaf. One prominent example of the continuing efforts of the industry has been the maintenance of public telephones that are compatible with hearing aids. Today, all coin-operated telephones that the Bell Operating Companies own can be used with specially designed hearing aids; by the end of this year, the same will be true of telephones in territories served by GTE.

Presently, telephone companies also cooperate with State utility commissions to ensure that persons with physical disabilities have access to our telephone network. Dramatic evidence of this cooperation is abundant. The totally deaf may obtain teletypewriters from many local telephone companies. Artificial larynxes developed by Bell Labs give voices to persons otherwise unable to speak. Persons with severe mobility impairments can signal an operator by exhaling on a suspended piece of tin foil that connects to a special telephone. On September 10, 1982, Bell Labs announced another breakthrough for the disabled—a paralyzed individual would be able to activate a telephone with his voice, speak the telephone number, and complete a call without assistance. In many cases, the physically impaired can afford these innovations only because local telephone companies provide these types of equipment below cost. The general ratepayer shares the unrecovered expenses of including disabled persons in the network.

In most States, carriers work with the State commission to develop reasonable programs that meet the needs of the hearing aid user and of other persons with special physical problems. But an unintended consequence of a new government regulation would jeopardize this status quo and make it impossible for the telephone company effectively to serve the handicapped.

The final decision of the Federal Communications Commission in the *Second Computer Inquiry*<sup>1</sup> is popularly known as *Computer II*. This order, which becomes effective in January, 1983, would prohibit telephone companies from subsidizing terminal equipment and require users to pay the full costs of equipment in their homes and places of business. The Commission proposes to rely upon competition to provide telephone equipment at affordable prices. For most ratepayers, deregulation may indeed ensure a competitive market in telephone sets and eliminate subsidies for such sets from local rates. For the disabled, however, the ban on cross-subsidization could mean unregulated price increases on the costly devices that are necessary for them to have access to the telephone network. Disabled persons who are

<sup>1</sup> Docket 20828, final decision released May 2, 1980, 77 F.C.C. 2d 384.

unable to afford the full costs of this equipment will lose access to telephone service. This would disserve the statutory goal of universal service, deprive many individuals of the opportunity to have gainful employment, and even require institutionalization of those disabled persons whose health must be monitored. The costs to society of such lost access, including impairment of the quality of life for disabled Americans, far exceed the costs of maintaining service that the current system allows telephone companies to include in their general revenue requirements.

The existing regime relies on the private enterprise of telephone carriers, rather than on a government bureaucracy, to ensure that the handicapped have access to the universal telephone network. If the Commission implements *Computer II* without modification, it would be unrealistic to expect State and local governments to establish procurement authorities to purchase and install the equipment vital to the disabled. Even if the States could assume this burden, it is unlikely that they could achieve the task as cost-effectively as the telephone company.

The Committee intends this legislation to benefit a specific class of individuals—those who rely on telephones compatible with hearing aids or who rely on other specialized terminal equipment. For years, the special needs of these groups have not received adequate attention at the Commission. The Commission has taken no action to resolve the issues raised in Docket 78-50, opened four years ago in order to consider standards for hearing aid compatibility and to resolve problems facing the deaf. There is no evidence that the Commission gave any consideration to the needs of the handicapped in the context of the *Second Computer Inquiry*, which precludes State commissions from requiring terminal equipment to be offered under tariff.

The Committee urges the Commission not to underestimate the impact that inability to use the telephone has on a person with impaired hearing or other handicaps. The policies set forth in the Telecommunications for the Disabled Act will ensure that these individuals can participate as self-sustaining employees and consumers in the national economy and that they can safely and conveniently travel from State to State with equal access to airports, hotels, restaurants, and other places of public accommodation.<sup>2</sup>

Hearing impairments affect a large number of Americans in all age groups.<sup>3</sup> The Commission has determined that 10.8 million citizens have sufficiently impaired hearing to require the use of a hearing aid. Four hundred thousand are totally deaf, while twice that number cannot understand any speech that is not amplified to a level that is medically dangerous. One of the most frustrating aspects of hearing impairment and deafness is the inability to use telecommunications media on which modern life has grown so dependent. Persons with normal hearing may be unable fully to appreciate the pervasiveness of the telephone both in commercial transactions and personal contacts. The inability to use this instrument, except through an interpreter, is not only a practical disability but a constant source of dependency and personal frustration. Conversely, the ability independently to use

<sup>2</sup> Each of these concerns is closely connected with interstate commerce. *Of. Katzenbach v. McClung*, 379 U.S. 294, 299 (1964); H.R. Rep. No. 914, 88th Cong., 1st Sess. at 18.

<sup>3</sup> According to the Office of Demographic Studies at Gallaudet College, more than 7 million Americans suffer from significant loss of hearing in both ears. Hearing disabilities are particularly widespread among the elderly.

the telephone may enable persons with other severe handicaps—such as paralysis or blindness—to lead self-sufficient lives in regular contact with society. The Committee believes that making the benefits of the technological revolution in telecommunications available to all Americans, including those with disabilities, should be a priority of our national telecommunications policy.

Age	Deaf since childhood	Significant bilateral loss	Hearing impaired	Total population
Less than 5.....	6,000	43,000	70,000	16,344,000
5 to 14.....	67,000	298,000	665,000	34,938,000
15 to 24.....	72,000	366,000	1,159,000	42,474,000
25 to 44.....	75,000	850,000	2,837,000	62,707,000
45 to 64.....	100,000	1,993,000	4,479,000	44,497,000
Over 65.....	158,000	4,437,000	7,020,000	25,544,000

Reliance on the private sector to provide access to telecommunications is particularly appropriate in times of fiscal austerity and contraction of government. Ensuring the availability of specialized equipment may enable handicapped individuals to support themselves, and in many cases to avoid institutionalization. The Committee is particularly interested in promoting devices that enable the elderly and the disabled safely to lead independent self-supporting lives. For the paralyzed veterans, “hands-off” telephone equipment may mean the difference between being able to live at home and work in an office or leading a life of constant surveillance in a hospital. Recently, radio devices have been developed that alert a patients’ doctor if he fails to signal periodically that he is not in need of medical assistance. The Telecommunications for the Disabled Act allows these various devices to be offered at affordable rates, whether or not a patient is institutionalized, thereby reducing hospital costs and encouraging more economic treatment of the physically impaired as outpatients.

The purpose of the reported bill is not to freeze technology, but rather to ensure that all persons enjoy the benefits of technological improvements in the telephone network, whether or not they are disabled. The Committee recognizes that some new technologies will make improved service possible for the ordinary user, but also may have potentially adverse impacts on disabled individuals. For example, the telephone company may in the future replace operator-assisted directory listings with a video terminal. While offering substantial economies and improved service to most individuals, such a change would eliminate a feature of the network upon which the blind currently rely. Instead of continuing to offer directly assistance for the blind, the most economical solution may be to provide specialized terminal equipment, perhaps actuated by voice, for use by these individuals. Subsection (g) permits the telephone company to implement these efficient solutions to the problems of the disabled. It allows certain terminal equipment to be treated as if it were “part of the network,” the costs of which all users share in order to preserve and enhance universality of service.

The Communications Act of 1934 mandates universal service, as do most State statutes that regulate intrastate communications. To the extent that a change in the network (such as a reduction in power lev-

els) confers substantial benefits on most users, but impairs universality of service by excluding disabled groups (such as persons using hearing aids), the Commission or State commission may require carriers to continue using current technologies. By allowing carriers to internalize in the ratebase the costs of making terminal equipment compatible with the technological development of the network, the regulatory authority can reconcile the competing policies and reach an economically superior result. In testimony, Mr. Dennis Sullivan of AT&T discussed this need for such flexibility with regard to the hearing impaired:

The door must be left open for future developments. . . . There may be other solutions to the coupling problem that are far superior to today's inductive coupling. Signal processing technology—currently available on a chip—could someday (perhaps within a decade)—through the use of noise cancellation techniques and low-frequency emphasis—facilitate vastly improved acoustic coupling in hearing aids. This technology is being sued today in satellite transmission circuits. *Hearing aid wearers are entitled to benefit from these and other advantages that might result from advancing technology.*

This is particularly important in light of the obvious trend in future telephone technology which is moving toward low-power, lightwave and digital systems. These future systems are expected to use new types of receiver units which will offer many advantages: smaller size, lighter weight, improved voice quality reception, significantly lower manufacturing costs and correspondingly lower consumer rates. Unfortunately, these future systems will also make built-in inductive coupling capability prohibitively expensive. [Emphasis supplied.]

Effective use of telephones by persons with impaired hearing is the goal that this legislation seeks to realize. The current arrangements for inductive coupling are only a means to achieve that goal. The legislation does not seek to entrench this technology, but rather to promote new, compatible technologies that provide improved service to all persons, with or without hearing impairments. Consistent with this policy, new Section 610(g) of the Communications Act of 1934 maintains an efficient financial mechanism to assure that telephone companies continue their historic role in making available the best technologically and economically feasible service to persons with impaired hearing or other physical disabilities.

#### COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause (2)(1)(3)(A) of Rule XI of the Rules of the House of Representatives, the Committee has made oversight findings as set forth in this report.

#### COMMITTEE ON GOVERNMENT OPERATIONS

Pursuant to clause 2(1)(3)(D) of Rule XI of the Rules of the House of Representatives, the Committee on Government Operations has submitted no oversight findings to the Committee.

# COMMITTEE COST ESTIMATE

In compliance with clause 7(a) of Rule XIII of the Rules of the House of Representatives, the Committee does not believe that S. 2355 as reported will impose costs on the Federal government. Although the legislation provides specific instructions with regard to a pending rulemaking, it believes that expeditious action along the lines suggested is necessary in any event. In all other regards, the Committee adopted the estimate provided by the Congressional Budget Office.

## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, D.C., September 24, 1982.*

HON. JOHN D. DINGELL,  
*Chairman, Committee on Energy and Commerce, U.S. House of Representatives, Rayburn House Office Building, Washington, D.C.*

DEAR MR. CHAIRMAN: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has reviewed S. 2355, the Telecommunications for the Disabled Act of 1982, as ordered reported by the House Committee on Energy and Commerce, September 22, 1982.

S. 2355 would require the Federal Communications Commission (FCC) to develop regulations to ensure reasonable access to telephone service to the hearing impaired. While a similar rulemaking has been initiated by the FCC, the legislation would broaden the authority of the FCC in this area. Based on information provided by the FCC, it is estimated that an additional \$200,000 could be required for staff time plus overhead in 1983 in order to complete this rulemaking within one year after the date of enactment, as required in the bill. In addition, it is likely that a minimum level of monitoring and enforcement would be required for approximately one year after completion of the rulemaking, although the cost of these activities is not expected to be significant.

Should the Committee so desire, we would be pleased to provide further details on this estimate. ✓

Sincerely,

ALICE M. RIVLIN, *Director.*

## INFLATIONARY IMPACT STATEMENT

Pursuant to clause 2(1)(4) of Rule XI of the Rules of the House of Representatives, the Committee states that S. 2355 as reported will have no measurable impact on wages and prices in the national economy.

## SECTION BY SECTION ANALYSIS

Section 1. This section states the short title of the legislation is "The Telecommunications for the Disabled Act of 1982."

Section 2. This section sets forth findings that establish the need to make available technologies that accommodate persons with impaired hearing, and states the policy that all persons, including the

disabled, should have available the best telecommunications service that is technologically and economically feasible.

Section 3. This section adds a new section 610, entitled "Telephone Service for the Disabled," to the Communications Act of 1934. Such new section consists of nine subsections, as follows:

SUBSECTION (a) OF NEW SECTION 610: REASONABLE ACCESS FOR  
THE HEARING IMPAIRED

This subsection directs the attention of the Commission to the special problems of persons with impaired hearing. The mandate of the Commission to ensure reasonable access to telephone service is limited to regulations and technical standards that ensure the availability of terminal equipment and transmission service for persons with impaired hearing and that govern the use of such equipment and its interconnection with telephone services for the transmission of voice or data.

These regulations may not impose unnecessary or unjustifiable costs on any party. Before promulgating any regulation under this subsection, the Commission must consider the costs the proposed requirements would impose and the benefits that would result for the hearing impaired and those with whom they communicate.

SUBSECTION (b) OF NEW SECTION 610: COMPATIBILITY OF  
ESSENTIAL TELEPHONES

The legislation requires that essential telephones provide internal means for effective use with hearing aids that are specially designed for telephone use. Most hearing aids have a built-in telephone pickup, or "telecoil," which is activated by a switch on the hearing aid. When this switch is placed in the "telephone" position, the microphone is turned off and the hearing aid can be used at full volume without feedback and with minimal background noise. Unless this type of hearing aid becomes technologically obsolete at some future time and disappears from popular use, it will be considered "specially designed for telephone use." Currently, these hearing aids are activated by the strong magnetic field generated by some 90 percent of all telephone receivers, such as the Western Electric 500 set.

The Committee chose not to specify that telephones necessarily use this method, known as "inductive coupling," in order to encourage any new technology which is at least equal to the quality of use that inductive coupling currently provides.<sup>4</sup> A telephone that couples inductively (without the use of a portable adapter) would, however, satisfy this requirement to provide internal means for effective use with hearing aids specially designed for telephone use.<sup>5</sup> Subsection (b) does not require telephones to include internal amplifiers; these devices, which are available in some public telephones, enhance use of the telephone by some persons with impaired hearing, whether or not their hearing aids are specially designed for telephone use.

<sup>4</sup> Although the additional costs of making telephones that are compatible with hearing aids are not now significant, it is possible that improvements in the network—such as a reduction in power levels—may increase this differential in cost.

<sup>5</sup> Persons with impaired hearing have complained that external adapters are too bulky to carry conveniently, draw attention to an apparent disability that has been overcome in all other situations, are susceptible to loss and damage, and require replacement of batteries after 90 hours of use (potentially at an inconvenient time). Western Electric has announced plans to introduce a newly designed adapter that will mitigate some of these inconveniences.

The reported bill does not require all telephones to be compatible with hearing aids. Rather, the bill preserves consumer choice while ensuring that the needs of the hearing impaired are fully served. The legislation focuses on those "essential telephones" to which the hearing impaired must have access if they are to function effectively in modern society. Companies are free to manufacture and to market non-compatible telephones, and businesses and consumers may purchase these instruments for use by persons who do not have hearing impairments.

#### *"Essential Telephones"*

The reported bill sets forth three classes of "essential telephones," each of which must be precisely delineated in the rulemaking that the Commission conducts under new section 610(f). Under no circumstances may the Commission designate as an essential telephone any residential telephone or any other telephone if all the persons who would normally use it do not have hearing impairments. The requirements that federal regulations issued pursuant to this subsection impose will preempt any existing or future State or local regulations that require telephones to provide internal means for effective use with hearing aids.

#### *"Coin-Operated Telephones"*

The term "coin-operated telephone" includes any telephone which is operated with coins, whether it is located on public property or in a "semipublic" location (such as a drug store, gas station, or private club). Since significant electrical power is required to accept coins, compatibility is now economical and should continue to be so in the future. Although the requirement that coin-operated telephones be retrofitted is universal in application, the overwhelming majority of coin phones are already hearing-aid compatible.

#### *"Telephones Provided for Emergency Use"*

The definition that the rulemaking adopts for "telephone provided for emergency use" must enumerate the types of locations in which access to a telephone may save persons from serious bodily injury, theft, or a life-threatening situation. The Committee intends that the term be defined to include voice-carrying devices in elevators, mine-shafts, and other places where a person with impaired hearing might be isolated in an emergency. The term must also include telephones specifically installed to alert the police, fire department, or other emergency authorities; typically such a telephone cannot reach other persons on the network. Finally, the Commission should prescribe specific guidelines for telephones provided to avoid life-threatening situations in hospitals and other institutions in which persons with impaired hearing may be confined.

#### *"Telephones Frequently Needed by Persons with Impaired Hearing"*

The third group of essential telephones to be defined by rule, those "frequently needed by persons with impaired hearing," must be hearing-aid compatible, but the legislation specifically prohibits the Commission from requiring equipment installed prior to the effective date of the Act to be retrofitted. This class includes any telephone that a carrier makes available for public use that is not either coin-operated or provided for emergency use. For example, after the date of enactment, new "Charge-a-Call" phones (or at least a reasonable number



at each location) must be compatible with hearing aids unless they are in the proximity of compatible phones providing the same range of service. The Committee intends that the Commission employ a common-sense approach; if a usable pay phone is nearby and readily available, the incompatible instrument is not "needed by the hearing impaired."

The Committee further intends that the Commission include essential telephones operated by persons other than carriers in this category after a detailed examination of the costs involved and of the benefits that the hearing-impaired and those with whom they communicate will realize. The definitions must be specific and provide detailed guidance as to the locations where such telephones must be available. These federal standards will preempt any additional or inconsistent requirements by State of local authorities.

Although the following examples of "telephones frequently needed by persons with impaired hearing" illustrate the intent of the Committee, it may be necessary periodically to revise the definition of such telephones if the incremental cost of making the telephones compatible increases or decreases.

*Places of Business.*—In the absence of extraordinary costs of implementation, persons with impaired hearing should be confident that they can effectively use any telephone made generally available to invitees in a place of business or in a public building, including phones restricted to local calling areas or to internal extensions.

*Workplaces.*—The Committee is also concerned that inability to use telephones should not impair the productivity of persons using a hearing aid in their place of work. An employee with impaired hearing should have access to at least one compatible telephone unless his duties would not involve the use of such a telephone if it were available. Regulations must be sufficiently specific to enable employers to comply without undue risk of an unexpectedly adverse interpretation in a subsequent proceeding for compliance.

*Hotels and Motels.*—The Committee observes that current law allows the Commission directly to regulate the offering of telephone service by hotel and motel owners. See *Ambassador, Inc. v. United States*, 325 U.S. 317 (1944). The legislation does not, however, impose costly requirements on these businesses. As an alternative to providing compatible telephones in every room, a hotel may set aside a reasonable number of rooms (under a formula that the regulations will specify) for the hearing impaired. Alternatively, the hotel owner may maintain a supply of compatible instruments and install them at the request of a guest who uses a hearing aid.

#### *"Require That Essential Telephones Provide"*

The Committee was concerned that the phrase requiring essential telephones to "be designed, manufactured, and operated so as to provide internal means for effective use with hearing aids" could be construed to permit the FCC to impose a requirement on manufacturers to design or produce compatible equipment. The reported bill resolves any such ambiguity by using more direct language: "The Commission shall require that essential telephones provide internal means for effective use. . . ." This clarifies the intent of the Committee that compliance depend on how an instrument is used, not how it is manufac-

tured. It would not violate the Act to design or manufacture a non-compatible phone, if it is labeled according to applicable regulations. It would violate the Act, however, to use or to connect with the network a noncompatible instrument under circumstances causing it to be designated an "essential telephone."

The legislation does not impose an obligation on any specific person to manufacture compatible equipment. The Committee expects competitive markets to supply equipment for use with hearing aids at affordable prices. For example, equipment such as the Bell System's "U-Type" handset, introduced by Western Electric more than 20 years ago, has also been manufactured by Northern Telecom, ITT, and Stromberg Carlson. According to the Electronic Industries Association, over 80 percent of all telephones in the United States are now compatible. An even larger percentage of essential telephones is already in compliance. The Bell System has installed auxiliary coils to make all of its coin-operated telephones and "Charge-a-Call" stations compatible, and GTE has announced that it will complete a similar program by the end of the year. Western Electric will shortly introduce a new generation of compatible handsets, so compatible equipment should be widely available in the foreseeable future.

#### SUBSECTION (c) OF NEW SECTION 610: TECHNICAL STANDARDS

The Committee notes that the hearing aid industry and the telephone industry have made substantial progress toward establishing technical standards to ensure compatibility of hearing aids and telephones and expects similar efforts to resolve most conflicting standards on other areas. The Committee intends the Commission to rely on the development of standards by industry, but this section also gives the Commission authority to set such standards in the absence of industry agreement or in the event consumers establish that the standard fails to provide satisfactory results.

The Committee does not intend technical standards to freeze technology by specifying a permissible design and excluding potentially superior alternatives. The Commission should expeditiously accept any new design which is compatible with existing technologies and provides results which are equivalent or superior to these achieved by an existing standard.

The Committee intends that any standards established by the Commission (or developed by industry and approved by the Commission) should be nationally uniform, and that States be preempted from establishing conflicting technical standards. With the exception of this subsection and subsection (b), nothing in the legislation changes the division of jurisdictional responsibility between the Commission and the State commissions or in any other way diminishes the rights and authorities of the States as they existed on the date of enactment.

The Committee intends that the application of technical standards take place in the context of current Commission regulations. Part 68 of the rules of the Commission requires customers connecting terminal equipment to the public switched network to supply the telephone company with registration numbers for the types of equipment to be connected.<sup>6</sup> In order to make their equipment marketable, manufac-

<sup>6</sup> 47 C.F.R. 68.102.

turers submit each equipment type to the Commission for registration, which is approved only if it is determined that the use of the equipment will not harm the network. The conditions for registration include the performance of environmental simulations, which test the equipment to be registered in its intended use.<sup>7</sup> The Committee expects that the Commission will require manufacturers applying for type registrations of telephone sets to specify whether the equipment provides internal means for effective use with hearing aids, and that engineering tests will verify that equipment intended for such use meets the technical standards established pursuant to this subsection. For telephone sets not meeting these standards, the Commission would issue a registration condition on the use of the instrument only in circumstances that would not cause it to be designated an "essential telephone." This limitation would be clearly disclosed to the purchaser, who would be prohibited from using the instrument except as a non-essential telephone.

#### SUBSECTION (d) OF NEW SECTION 610: LABELING OF PACKAGING MATERIALS

Subsection (d) directs the Commission to develop requirements for packaging materials that explain, in a clear understandable manner, whether and how persons with impaired hearing may use such equipment effectively. Although the legislation does not specifically require manufactureres to label telephone equipment, the Committee observes that it would be desirable for persons using hearing aids to be able to identify noncompatible telephones whenever traveling outside their homes.

#### SUBSECTION (e) OF NEW SECTION 610: REGULATORY CONSIDERATIONS

The legislation delegates to the Commission the establishment of precise requirements in an area of considerable complexity. Moreover, the Committee expects economic and technological possibilities and constraints to shift rapidly. Therefore, this subsection states the policies that the Committee intends to guide the initial rulemaking and any subsequent revisions.

The Commission must consider the costs and benefits of any regulation implemented or rescinded pursuant to this section. Although the statutory language refers to "all telephone users, with or without hearing impairments," the Committee also intends a consideration of social costs and benefits indirectly related to telephone use, including the benefits of reduced institutionalization, increased mobility, and enhanced productivity by disabled persons.

#### SUBSECTION (f) OF NEW SECTION 610: RULEMAKING; PROSPECTIVITY

The Committee is concerned by the failure of the Commission expeditiously to conclude Docket 78-50, "Telecommunications for the Deaf and Hearing Impaired." Accordingly, it mandates that the Commission take final action in this rulemaking and issue the regulations that this section requires within one year.

The Committee also intends that the Commission review regulations issued under subsections (a), (b), and (c) in order to assure that they

<sup>7</sup> 47 C.F.R. 68.302.

continue to provide the most cost-effective solution consistent with changing technology.

In order to implement subsection (g), the Committee expects the Commission to issue conforming modifications relating to specialized terminal equipment prior to January 1, 1983, the effective date of its final decision in *Computer II*.

The legislation prohibits the Commission from requiring that telephones "frequently needed for use by persons using hearing aids" be retrofitted. This prohibition applies only to those telephones which fit into neither of the other categories ("coin-operated telephones" or "telephones provided for emergency use") and which were not compatible on the date of enactment. In the event that, after enactment, a person obtains an instrument that is not compatible with hearing aids for installation as an essential telephone, this subsection does not preclude an order requiring that the instruments be brought into compliance.

#### SUBSECTION (g) OF NEW SECTION 610: SPECIALIZED TERMINAL EQUIPMENT

In its *Computer II* decision, the Commission required the provision by carriers of terminal equipment for use in conjunction with the interstate telecommunications network to "be separate and distinct from the provision of common carrier communications services and not offered on a tariffed basis."<sup>8</sup> The detariffing of terminal equipment will cause competition to drive prices to costs and will effectively prevent the State commissions from regulating the price and other terms under which the consumer obtains terminal equipment. The Committee believes that, as applied to disabled persons, such a policy could lead to substantial price increases and reductions in the access to the nationwide network which persons with disabilities currently enjoy.<sup>9</sup> It is the purpose of this legislation to increase the access of the physically impaired to new technologies and not to allow the level of service currently available to deteriorate.

The Committee emphasizes that the exception required from *Computer II* only applies to equipment actually needed by disabled persons. Any tariffs or subsidies from the rate base must be restricted to those persons, to institutions which serve them, and to associates who require compatible equipment regularly in order to communicate with them.

Examples make clear the limited scope of the statutory exception. Speakerphones may be vital to a person with impaired mobility; to a businessman they are a mere convenience. This subsection would only authorize a subsidy directed exclusively at the disabled. In the case

<sup>8</sup> 47 C.F.R. 64.702(e), as added, 77 F.C.C. 2d at 499.

<sup>9</sup> A study recently commissioned by the Department of Commerce observed:

"Although . . . deregulation may generate new industry competition and superior products at lower prices, Computer Inquiry II probably will bring with it a shift to cost-based pricing; thus, consumers will be forced to bear more and more of the actual cost of the individual services they use. . . . This type of pricing could cause substantial problems for deaf users.

"A Nationwide Communications System for the Hearing Impaired: Strategies Toward Commercial Implementation, NTIA Contract No. NT-81-SAC-00070, prepared by SRI International, at 10 (October 1981)."

of equipment for non-voice communications by the disabled, the State commission could extend a subsidy to non-handicapped persons who require such equipment regularly to communicate with the disabled.

The State commission may allow only reasonable and prudent costs to be included in any tariff. The Committee intends that any excessive costs resulting from discriminatory procurement practices would not be considered reasonable and prudent. To allow recovery in excess of reasonable and prudent costs would severely distort the nationwide market for terminal equipment.

Subsection (g) does not specify that offerings of specialized equipment by carriers be under tariff. As a result of this legislation, it will be permissible to offer such equipment under tariff or on a deregulated basis. Carriers may offer such equipment directly or through a separate corporate entity under common control. In light of the record of voluntary cooperation by the industry, the Committee found it unnecessary specifically to address the possibility of a "recalcitrant carrier" that might decline to participate in a program of subsidized offerings sanctioned by the State commission. Nor does the legislation address the possible offering of terminal equipment to the handicapped under federal tariffs. These matters may be considered, if necessary, in formulating the required modifications to *Computer II*.

#### SUBSECTION (h) OF NEW SECTION 610: ENFORCEMENT

The Committee believes that to avoid the imposition of undue regulatory burdens on carriers and other persons required to make compatible telephones available, uniform national standards are necessary. Therefore, the legislation preempts the authority of States to issue differing technical standards or substantive requirements relating to the compatibility of telephones with hearing aids. However, the Committee believes that State enforcement of these uniform national standards would be cost-effective as it would avoid Federal adjudication of disputes that are essentially local in nature. Accordingly, subsection (h) requires the Commission to delegate the enforcement of subsections (a) and (b) to any State commission that adopts the Federal regulations issued thereunder as its own. The delegation is revoked if the State commission fails to enforce the regulations. The Commission is expected to take all feasible steps to encourage the States to accept enforcement responsibilities.

The Committee expects the Commission to act promptly—no later than one year after the effective date of this Act—to establish detailed standards for compliance. At the conclusion of this rulemaking, the Commission should issue an order directing compliance with the regulations and publish such order, with an easily understood explanation thereof, in the *Federal Register*. The Committee believes that voluntary or expeditious compliance will be encouraged if a complainant or State commission serves a copy of such order on the alleged violator prior to commencement of any proceeding. The regulations should therefore provide a brief period after notification for compliance with the order before any formal compliance proceeding may commence.

#### CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of Rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in *italic*, existing law in which no change is proposed is shown in *roman*) :

## COMMUNICATIONS ACT OF 1934

\* \* \* \* \*

## TITLE VI—MISCELLANEOUS PROVISIONS

\* \* \* \* \*

## TELEPHONE SERVICE FOR THE DISABLED

*SEC. 610. (a) The Commission shall establish such regulations as are necessary to ensure reasonable access to telephone service by persons with impaired hearing.*

*(b) The Commission shall require that essential telephones provide internal means for effective use with hearings aids that are specially designed for telephone use. For purposes of this subsection, the term "essential telephones" means only coin-operated telephones, telephones provided for emergency use, and other telephones frequently needed for use by persons using such hearing aids.*

*(c) The Commission shall establish or approve such technical standards as are required to enforce this section.*

*(d) The Commission shall establish such requirements for the labeling of packaging materials for equipment as are needed to provide adequate information to consumers on the compatibility between telephones and hearing aids.*

*(e) In any rulemaking to implement the provisions of this section, the Commission shall specifically consider the costs and benefits to all telephone users, including persons with and without hearing impairments. The Commission shall ensure that regulations adopted to implement this section encourage the use of currently available technology and do not discourage or impair the development of improved technology.*

*(f) The Commission shall complete rulemaking actions required by this section and issue specific and detailed rules and regulations resulting therefrom within one year after the date of enactment the Telecommunications for the Disabled Act of 1982. Thereafter the Commission shall periodically review such rules and regulations. Except for coin-operated telephones and telephones provided for emergency use, the Commission may not require the retrofitting of equipment to achieve the purposes of this section.*

*(g) Any common carrier or connecting carrier may provide specialized terminal equipment needed by persons whose hearing, speech, vision, or mobility is impaired. The State commission may allow the carrier to recover in its tariffs for regulated service reasonable and prudent costs not charged directly to users of such equipment.*

*(h) The Commission shall delegate to each State commission the authority to enforce within such State compliance with the specific regulations that the Commission issues under subsections (a) and (b), conditioned upon the adoption and enforcement of such regulations by the State commission.*